High flow in-line valves

Compact and robust design

Low power energy efficient solenoids

High cycle life

Flexible in-line and fixed length manifold mounting options

Technical data

Connections:
1/8", 1/4", 3/8", and 1/2" NPT and ISO G
Medium:
Compressed air, filtered to 40 µm, lubricated or non-lubricated
Operation:
Softseal spool valve, solenoid and air pilot actuated
Mounting:
In-line or fixed length manifold
Maximum operating pressure: 116 psi (8 bar)
(Refer to Valve Selection Table for Minimum operating pressures.)

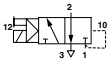
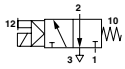
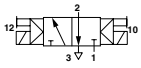
Flow Characteristics:

Size	Function	l/min	Cv
1/8	3/2 & 5/2	480	0.48
1/8	5/3	270	0.27
1/4	3/2 & 5/2	1020	1.02
1/4	5/3	755	0.75
3/8	3/2 & 5/2	1705	1.70
3/8	5/3	1190	1.19
1/2	3/2 & 5/2	2480	2.48
1/2	5/3	1910	1.91

Ambient & medium temperature:
23°F to 140°F (-5°C to 60°C) pilot models
23°F to 122°F (-5°C to 50°C) solenoid models
(consult our Technical Service for use below 36°F (2°C)

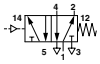
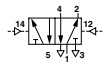
Materials
Body/sub-base: die-cast aluminum alloy or aluminum alloy
Softseal spool: NBR/aluminum alloy
Mounting screws: Plated steel
Springs: stainless steel

3/2 Air pilot valves

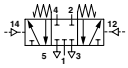
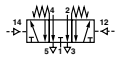
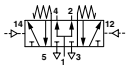
Symbol	Model	Port size (NPT)	Function*	Operator/ operator	Flow Cv	Operating pressure (psi)	Pilot pressure (psi	Weight (lbs)	Drawing No.
	V50P4D3A-XP0900	1/8	3/2 NC	Air/ Air spring	0.48	0 to 116	22 to 116	0.13	12
	V51R4D7A-XP0900	1/4	3/2 NC	Air/Spring	1.02	0 to 116	22 to 116	0.27	13
	V52S4D7A-XP0900	3/8	3/2 NC	Air/Spring	1.70	0 to 116	29 to 116	0.65	13
	V53T4D7A-XP0900	1/2	3/2 NC	Air/Spring	2.48	0 to 116	29 to 116	0.66	13
	V50P4DDA-XP0200	1/8	3/2	Air/Air	0.48	0 to 116	22 to 116	0.16	14
	V51R4DDA-XP0200	1/4	3/2	Air/Air	1.02	0 to 116	22 to 116	0.30	15
	V52S4DDA-XP0200	3/8	3/2	Air/Air	1.70	0 to 116	29 to 116	0.71	15
	V53T4DDA-XP0200	1/2	3/2	Air/Air	2.48	0 to 116	29 to 116	0.72	15

* NC = Normally Closed
NO = Normally Open

5/2 Air pilot valves

Symbol	Model	Port size (NPT)	Function	Operator/ operator	Flow Cv	Operating pressure (psi)	Pilot pressure (psi	Weight (lbs)	Drawing No.
	V50P5D3A-XP0900	1/8	5/2	Air/ Air spring	0.48	0 to 116	22 to 116	0.16	16
	V51R5D7A-XP0900	1/4	5/2	Air/Spring	1.02	0 to 116	22 to 116	0.23	17
	V52S5D7A-XP0900	3/8	5/2	Air/Spring	1.70	0 to 116	29 to 116	0.52	17
	V53T5D7A-XP0900	1/2	5/2	Air/Spring	2.48	0 to 116	29 to 116	0.61	17
	V50P5DDA-XP0200	1/8	5/2	Air/Air	0.48	0 to 116	22 to 116	0.19	18
	V51R5DDA-XP0200	1/4	5/2	Air/Air	1.02	0 to 116	22 to 116	0.30	19
	V52S5DDA-XP0200	3/8	5/2	Air/Air	1.70	0 to 116	29 to 116	0.52	19
	V53T5DDA-XP0200	1/2	5/2	Air/Air	2.48	0 to 116	29 to 116	1.65	19

5/3 Air pilot valves

Symbol	Model	Port size (NPT)	Function*	Operator/ operator	Flow Cv	Operating pressure (psi)	Pilot pressure (psi	Weight (lbs)	Drawing No.
	V50P6DDA-XP0200	1/8	5/3 APB	Air/Air	0.27	0 to 116	22 to 116	???	20
	V51R6DDA-XP0200	1/4	5/3 APB	Air/Air	0.75	0 to 116	22 to 116	0.39	21
	V52S6DDA-XP0200	3/8	5/3 APB	Air/Air	1.19	0 to 116	29 to 116	0.66	22
	V53T6DDA-XP0200	1/2	5/3 APB	Air/Air	1.91	0 to 116	29 to 116	0.75	22
	V50P7DDA-XP0200	1/8	5/3 COE	Air/Air	0.27	0 to 116	22 to 116	???	20
	V51R7DDA-XP0200	1/4	5/3 COE	Air/Air	0.75	0 to 116	22 to 116	0.39	21
	V52S7DDA-XP0200	3/8	5/3 COE	Air/Air	1.19	0 to 116	29 to 116	0.66	22
	V53T7DDA-XP0200	1/2	5/3 COE	Air/Air	1.91	0 to 116	29 to 116	0.75	22
	V50P8DDA-XP0200	1/8	5/3 COP	Air/Air	0.27	0 to 116	22 to 116	???	20
	V51R8DDA-XP0200	1/4	5/3 COP	Air/Air	0.75	0 to 116	22 to 116	0.39	21
	V52S8DDA-XP0200	3/8	5/3 COP	Air/Air	1.19	0 to 116	29 to 116	0.66	22
	V53T8DDA-XP0200	1/2	5/3 COP	Air/Air	1.91	0 to 116	29 to 116	0.75	22

* APB = All Ports Blocked, COE = Center Open Exhaust, COP = Center Open Pressure.

Air Pilot Valve Options selector

V5★★★D★A-X★0★00

Thread size	Substitute
1/8"	0
1/4"	1
3/8"	2
1/2"	3
Thread type	**Substitute**
1/8 NPT	P
1/4 NPT	R
3/8 NPT	S
1/2 NPT	T
G 1/8	A
G 1/4	B
G 3/8	C
G 1/2	D

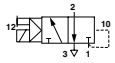
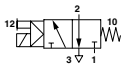
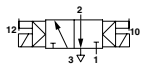
Return	Substitute
Double air pilot	2
Single air pilot	9
Pilot port thread	**Substitute**
1/8 NPT	P
G 1/8	A
Pilot	**Substitute**
Single air/Air spring (V50 only)	3
Single air/Spring return	7
Double air	D
Function	**Substitute**
3/2 Normally closed	4
5/2	5
5/3 All ports blocked	6
5/3 Center open exhaust	7
5/3 Center open pressure	8

Ordering example

To order a 5/2 valve, 3/8 NPT ports, air pilot, spring return

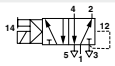
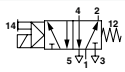
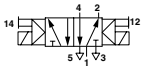
quote: V52S5D7A-XP0900

3/2 Solenoid pilot valves

Symbol	Model	Port size (NPT)	Function*	Pilot supply	Operator	Flow Cv	Operating pressure (psi)	Manual override	Weight (lbs)	Drawing No.
	V50P413A-A2***†	1/8	3/2 NC	Internal	Solenoid	0.48	29 to 116	Push & turn	0.26	1
	V51R417A-A2***†	1/4	3/2 NC	Internal	Solenoid/spring	1.02	29 to 116	Push & turn	0.45	2
	V52S417A-A2***†	3/8	3/2 NC	Internal	Solenoid/spring	1.70	29 to 116	Push & turn	0.77	2
	V53T417A-A2***†	1/2	3/2 NC	Internal	Solenoid/spring	2.48	29 to 116	Push & turn	0.79	2
	V50P411A-A2***†	1/8	3/2	Internal	Solenoid/solenoid	0.48	29 to 116	Push & turn	0.38	3
	V51R411A-A2***†	1/4	3/2	Internal	Solenoid/solenoid	1.02	29 to 116	Push & turn	0.65	4
	V52S411A-A2***†	3/8	3/2	Internal	Solenoid/solenoid	1.70	29 to 116	Push & turn	0.97	4
	V53T411A-A2***†	1/2	3/2	Internal	Solenoid/solenoid	2.48	29 to 116	Push & turn	0.96	4

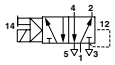
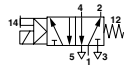
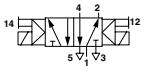
* NC = Normally closed
*** Insert coil code. † Insert Connector code.

5/2 Solenoid pilot valves

Symbol	Model	Port size (NPT)	Function	Pilot supply	Operator	Flow Cv	Operating pressure (psi)	Manual override	Weight (lbs)	Drawing No.
	V50P513A-A2***†	1/8	5/2	Internal	Solenoid/air	0.48	29 to 116	Push & turn	0.27	5
	V51R517A-A2***†	1/4	5/2	Internal	Solenoid/spring	1.02	29 to 116	Push & turn	0.41	6
	V52S517A-A2***†	3/8	5/2	Internal	Solenoid/spring	170	29 to 116	Push & turn	0.65	6
	V53T517A-A2***†	1/2	5/2	Internal	Solenoid/spring	2.48	29 to 116	Push & turn	0.67	6
	V50P511A-A2***†	1/8	5/2	Internal	Solenoid/solenoid	0.48	29 to 116	Push & turn	0.39	7
	V51R511A-A2***†	1/4	5/2	Internal	Solenoid/solenoid	1.02	29 to 116	Push & turn	0.64	8
	V52S511A-A2***†	3/8	5/2	Internal	Solenoid/solenoid	1.70	29 to 116	Push & turn	1.0	8
	V53T511A-A2***†	1/2	5/2	Internal	Solenoid/solenoid	2.48	29 to 116	Push & turn	0.42	8

*** Insert coil code. † Insert Connector code.

5/3 Solenoid pilot valves

Symbol	Model	Port size (NPT)	Function***†	Pilot supply	Operator	Flow Cv	Operating pressure (psi)	Manual override	Weight (lbs)	Drawing No.
	V50P611A-A2***†	1/8	5/3 APB	Internal	Solenoid/solenoid	0.27	44 to 116	Push & turn	0.75	9
	V51R611A-A2***†	1/4	5/3 APB	Internal	Solenoid/solenoid	0.75	44 to 116	Push & turn	0.85	10
	V52S611A-A2***†	3/8	5/3 APB	Internal	Solenoid/solenoid	1.19	44 to 116	Push & turn	1.25	11
	V53T611A-A2***†	1/2	5/3 APB	Internal	Solenoid/solenoid	1.91	44 to 116	Push & turn	1.40	11
	V50P711A-A2***†	1/8	5/3 COE	Internal	Solenoid/solenoid	0.27	44 to 116	Push & turn	0.75	9
	V51R711A-A2***†	1/4	5/3 COE	Internal	Solenoid/solenoid	0.75	44 to 116	Push & turn	0.85	10
	V52S711A-A2***†	3/8	5/3 COE	Internal	Solenoid/solenoid	1.19	44 to 116	Push & turn	1.25	11
	V53T711A-A2***†	1/2	5/3 COE	Internal	Solenoid/solenoid	1.91	44 to 116	Push & turn	1.40	11
	V50P811A-A2***†	1/8	5/3 COP	Internal	Solenoid/solenoid	0.27	44 to 116	Push & turn	0.75	9
	V51R811A-A2***†	1/4	5/3 COP	Internal	Solenoid/solenoid	0.75	44 to 116	Push & turn	0.85	10
	V52S811A-A2***†	3/8	5/3 COP	Internal	Solenoid/solenoid	1.19	44 to 116	Push & turn	1.25	11
	V53T811A-A2***†	1/2	5/3 COP	Internal	Solenoid/solenoid	1.91	44 to 116	Push & turn	1.40	11

* APB = All Ports Blocked, COE = Center Open Exhaust, COP = Center Open Pressure.
*** Insert coil code. † Insert Connector code.

V50 series
*** Voltage codes and spare solenoid kits

Voltage	Code	Power Inrush/hold	Replacement Coil Model
12 VDC	12A	2.5 W	V12958-A12
24 VDC	13A	2.5 W	V12958-A13
110/120 VAC 50/60 Hz	18A	3.7/3.1 VA	V12958-A18

V51 to V53 series
*** Voltage codes and spare solenoid kits

Voltage	Code	Power Inrush/hold	Replacement Coil Model
12 VDC	12J	2.0 W	54469-01
24 VDC	13J	2.0 W	54469-02
110/120 VAC 50/60 Hz	18J	4.0/2.5 VA	54469-03

† V50 solenoid connectors

Connectors, 15 mm, DIN 43650, Form 'C'

Code	Model	Description
B	V10027-D00	0 to 240 VAC/VDC
C	V10013-D03	0 to 240 VAC/VDC, 6 ft. molded cable
H	V10012-D13	12 to 24 VAC/VDC w/indicator light
J	V10012-D18	120 VAC/VDC w/indicator light

† V51, V52, and V53 solenoid connectors

Connectors, 22 mm, industrial standard

Code	Model	Description
B	54934-01	0 to 240 VAC/VDC.
C	54934-21	0 to 240 VAC/VDC, 6 ft. [1m] molded cable
H	54934-08	12 to 24 VAC/VDC w/indicator light
J	54934-02	120 VAC/VDC w/indicator light

Solenoid Valve Options selector

V5★★★1★A-A2★★★ ★

Thread size	Substitute
1/8"	0
1/4"	1
3/8"	2
1/2"	3

Thread type	Substitute
1/8 NPT	P
1/4 NPT	R
3/8 NPT	S
1/2 NPT	T
G 1/8	A
G 1/4	B
G 3/8	C
G 1/2	D

Connectors, 15 mm, DIN 43650, Form 'C'	Substitute
No connector	A
0 to 240 VAC/DC w/ cable grip	B
0 to 240 VAC/DC. w/ 6 ft.molded cable	C
12 to 24 VAC/VDC w/indicator light and cable grip	H
120 VAC/VDC w/indicator light and cable grip	J

Connectors, 22 mm industrial standard	Substitute
No connector	A
0 to 240 VAC/DC	B
0 to 240 VAC/DC, 6 ft. [1m] molded cable	C
12 to 24 VAC/VDC w/indicator light and cable grip	H
120 VAC/VDC w/indicator light and cable grip	J

Voltage (V50 valve series)	Substitute
12 VDC 2.5 W	12A
24 VDC 2.5 W	13A
110/120 VAC (50/60 Hz) 3.7/3.2 VA	18A

Voltage (V51 to V53 valve series)	Substitute
12 VDC 2.0 W	12J
24 VDC 2.0 W	13J
110/120 VAC (50/60 Hz) 4.0/2.5 VA	18J

Actuation	Substitute
Solenoid/ Air Spring (V50 only)	3
Solenoid/Spring	7
Solenoid/Solenoid	1

Function	Substitute
3/2 Normally closed	4
5/2	5
5/3 All ports blocked	6
5/3 Center open exhaust	7
5/3 Center open pressure	8

Ordering example

To order a 5/2 solenoid valve, 1/4 NPT ports, spring return, 24 VDC, with DIN connector.

quote: V51R517A-A213JB

Electrical details for V50 solenoid operators

Voltage tolerances	+/- 10%
Rating	100 % Continuous duty
Inlet orifice	0.8 mm
Materials	PPS (body, FKM and NBR (seal)
Insulation class	F class
Connector type	DIN 43650 Table "C"
Protection class	IP65 (with sealed plugs)

Electrical details for V51 to V53 solenoid operators

Voltage tolerances	+/- 10%
Rating	100 % Continuous duty
Inlet orifice	0.8 mm
Materials	PPS (body), FKM and NBR (seal)
Insulation class	F class
Connector type	22 mm industrial standard
Protection class	IP65 (with sealed plugs)

Manifold system and blanking plates

	Manifold for 3 port valves		Blanking plate for 3 port valves	Silencers plastic		Silencers sintered bronze	
							
Series	NPT	BSPP		**NPT**	**BSP**	**NPT**	**BSP**
V50 (1/4")	V50P3**	V50A3**	V500351	C/S2	M/S2	MS002A	T40C2800
V51 (1/4")	V51R3**	V51B3**	V510351	C/S2	M/S2	MS002A	T40C2800
V52 (3/8")	V52S3**	V52C3v*	V520351	C/S3	M/S3	MS003A	T40C3800
V53 (1/2")	V53T3**	V53D3**	V530351	C/S4	M/S4	MS004A	T40C4800

** Number of station 02 to 10 stations
Example: 5 station manifold part number V51R305

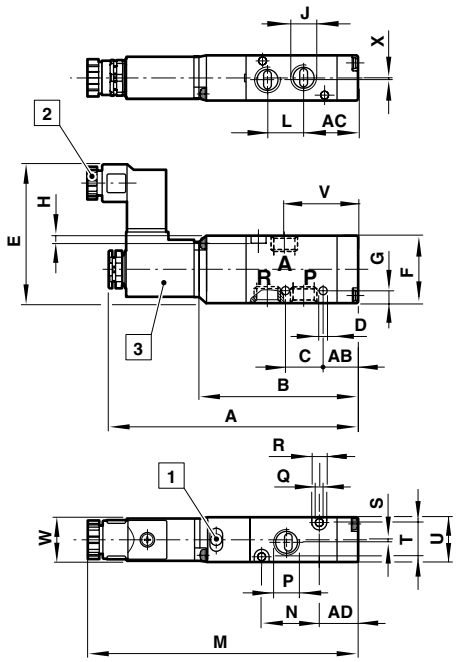
	Manifold for 5 port valves		Blanking plate for 5 port valves	Silencers plastic		Silencers sintered bronze	
							
Series	NPT	BSPP		**NPT**	**BSP**	**NPT**	**BSP**
V50 (1/4")	V50P5**	V50A5**	V500551	C/S2	M/S2	MS002A	T40C2800
V51 (1/4")	V51R5**	V51B5**	V510551	C/S2	M/S2	MS002A	T40C2800
V52 (3/8")	V52S5**	V52C5**	V520551	C/S3	M/S3	MS003A	T40C3800
V53 (1/2")	V53T5**	V53D5**	V530551	C/S4	M/S4	MS004A	T40C4800

** Number of station 02 to 10 stations
Example: 4 station manifold part number V50P504

Valve dimensions

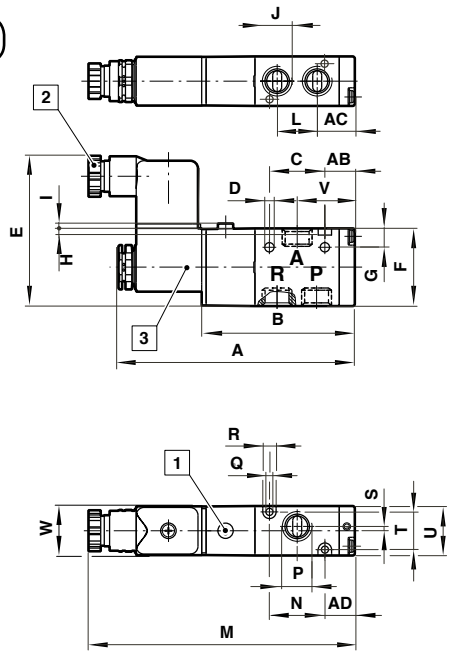
3/2 Single solenoid pilot valve, 1/8" port Air Spring return

1



3/2 Single solenoid pilot valve, 1/4"to 1/2" ports Mechanical spring return

2



1 Manual override (Push and Turn)
2 4-6 mm cable dia.
3 Solenoid rotates
2 x 180° (V50) 4 x 90° (V51toV53)
4 6-8 mm cable dia.

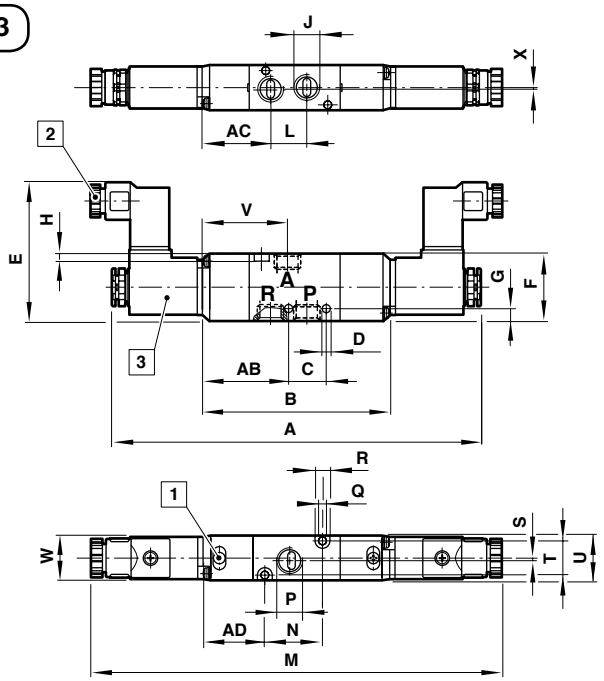
Series	Drawing	A	AB	AC	AD	B	C	D	E	F	G	H	I	J
V50	1	3.92	0.53	0.85	0.59	2.56	0.59	0.13	2.19	1.06	0.20	0.12	-	1/8"
V51	2	4.23	0.53	0.67	0.53	2.72	0.98	0.17	2.68	1.38	0.33	0.12	0.12	1/4"
V52	2	4.98	0.51	1.02	0.59	3.50	1.02	0.18	2.87	1.83	1.56	0.16	0.12	3/8"
V53	2	5.24	0.49	1.06	0.59	3.78	1.14	0.18	2.87	1.83	1.56	0.16	0.12	1/2"

Series	Drawing	L	M	N	P	Q	R	S	T	U	V	W	X
V50	1	0.57	4.25	0.91	1/8"	0.13	0.24	0.04	0.51	0.71	1.16	0.63	0.02
V51	2	0.71	4.72	0.98	1/4"	0.13	0.24	0.08	0.67	0.89	1.02	0.87	-
V52	2	1.02	5.49	1.61	3/8"	0.18	0.31	-	0.91	1.18	1.61	0.87	-
V53	2	1.14	5.75	1.89	1/2"	0.17	0.31	0.10	0.91	1.18	1.59	0.87	-

Dimensions in inches

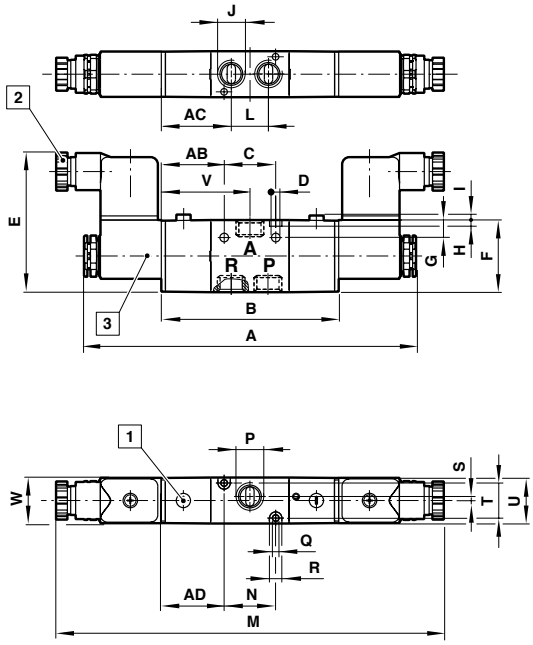
3/2 Double solenoid pilot valve, 1/8" port

3



3/2 Double solenoid pilot valve, 1/4"to 1/2" ports

4



1 Manual override (Push and Turn)
2 4-6 mm cable dia.
3 Solenoid rotates
2 x 180° (V50) 4 x 90° (V51toV53)
4 6-8 mm cable dia.

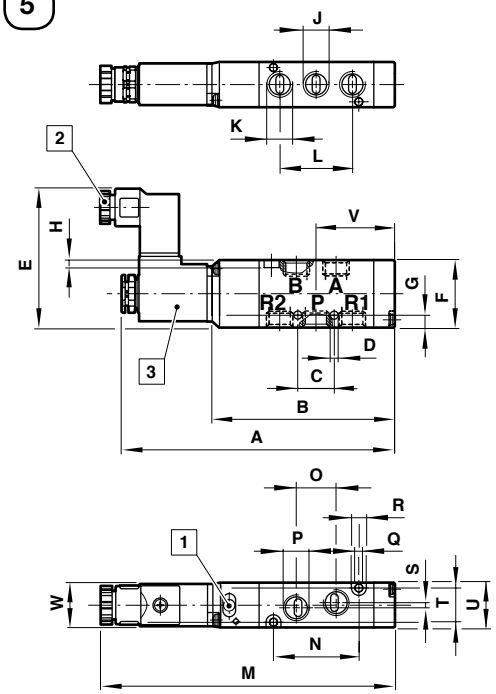
Series	Drawing	A	AB	AC	AD	B	C	D	E	F	G	H	I	J
V50	3	5.69	1.44	1.14	1.06	3.01	0.59	0.13	2.19	1.06	0.20	0.12	-	1/8"
V51	4	5.75	1.20	1.34	1.20	3.39	0.98	0.17	2.68	1.38	0.33	0.12	0.12	1/4"
V52	4	7.17	1.22	1.73	1.30	4.21	1.02	0.18	2.87	1.83	1.56	0.16	0.12	3/8"
V53	4	7.40	1.20	1.77	1.30	4.49	1.14	0.18	2.87	1.83	1.56	0.16	0.12	1/2"

Series	Drawing	L	M	N	P	Q	R	S	T	U	V	W	X
V50	3	0.58	6.46	0.92	1/8"	0.13	0.24	0.04	0.52	0.72	1.42	0.64	0.02
V51	4	0.72	7.52	1.00	1/4"	0.13	0.24	0.08	0.68	0.90	1.72	0.88	-
V52	4	1.04	8.32	1.64	3/8"	0.18	0.32	-	0.92	1.20	2.38	0.88	-
V53	4	1.16	8.56	1.92	1/2"	0.17	0.32	0.10	0.92	1.20	2.34	0.88	-

Dimensions in inches

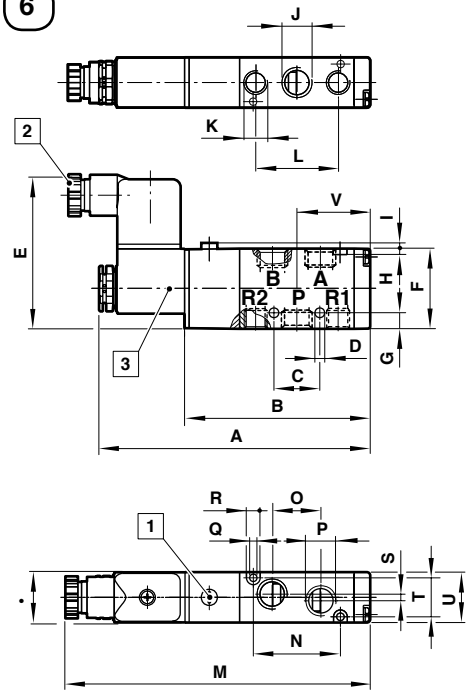
5/2 Single solenoid pilot valve, 1/8" port Air spring return

5



5/2 Single solenoid pilot valve, 1/4"to 1/2" ports Mechanical spring return

6



1 Manual override (Push and Turn)
2 4-6 mm cable dia.
3 Solenoid rotates
2 x 180° (V50) 4 x 90° (V51toV53)
4 6-8 mm cable dia.

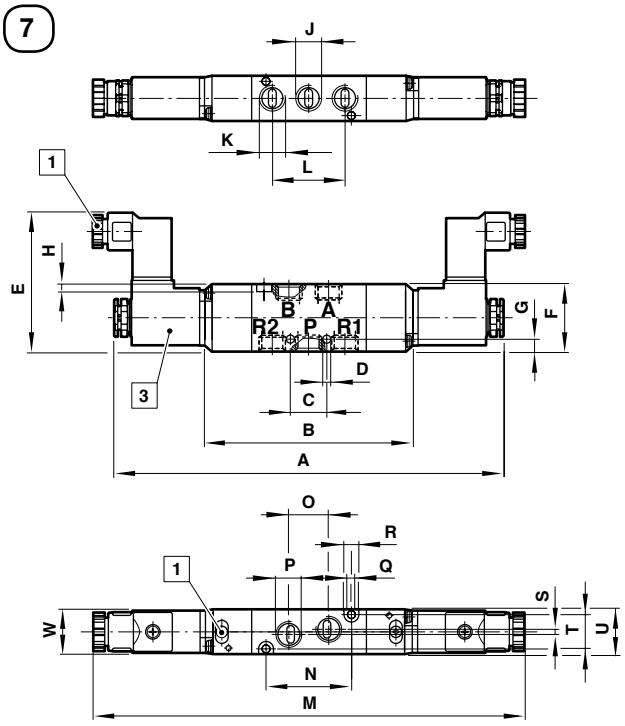
Series	Drawing	A	B	C	D	E	F	G	H	I	J	K	L
V50	5	4.25	2.99	0.57	0.13	2.17	1.06	0.20	0.12	-	1/8"	1/8"	1.14
V51	6	4.55	3.19	0.79	0.17	2.64	1.38	0.28	0.12	0.12	1/4"	1/8"	1.42
V52	6	5.59	4.25	1.02	0.22	2.83	1.83	0.18	0.16	0.12	3/8"	3/8"	2.05
V53	6	6.18	4.72	1.14	0.18	2.87	1.83	0.28	0.16	0.12	1/2"	1/2"	2.28

Series	Drawing	M	N	O	P	Q	R	S	T	U	V	W
V50	5	4.72	1.34	0.63	1/8"	0.13	0.24	0.08	0.51	0.71	1.30	0.63
V51	6	5.12	1.50	0.83	1/4"	0.13	0.24	0.12	0.67	0.89	1.26	0.87
V52	6	6.14	0.51	1.18	3/8"	0.18	0.31	-	0.91	1.18	1.77	0.87
V53	6	6.69	2.83	1.10	1/2"	0.17	0.31	0.18	0.91	1.18	2.01	0.87

Dimensions in inches

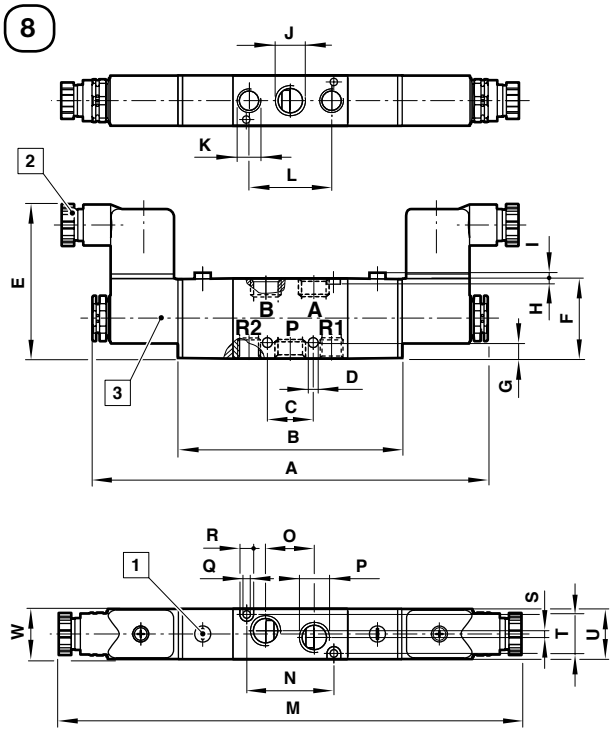
5/2 Double solenoid pilot valve, 1/8" port

7



5/2 Double solenoid pilot valve, 1/4"to 1/2" ports

8



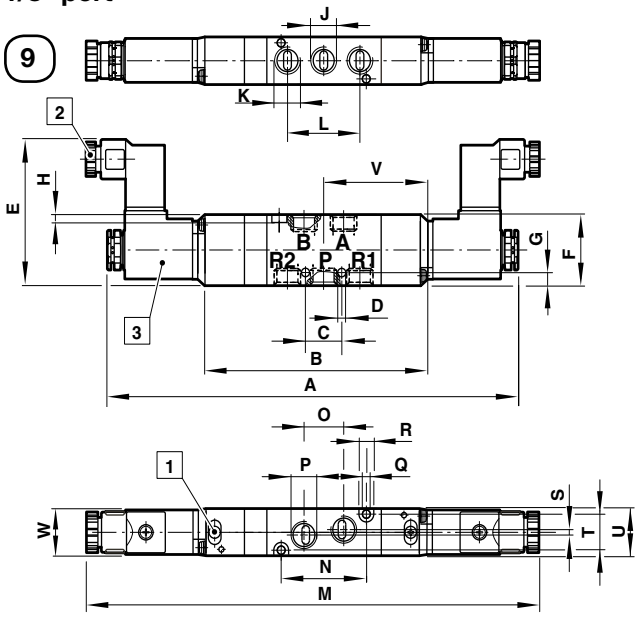
1 Manual override (Push and Turn)
2 4-6 mm cable dia.
3 Solenoid rotates
2 x 180° (V50) 4 x 90° (V51toV53)
4 6-8 mm cable dia.

Series	Drawing	A	B	C	D	E	F	G	H	I	J	K	L
V50	7	6.06	3.43	0.57	0.13	2.17	1.06	0.20	0.12	-	1/8"	1/8"	1.14
V51	8	6.57	3.82	0.79	0.17	2.64	1.38	0.28	0.12	0.12	1/4"	1/8"	1.42
V52	8	7.64	4.96	1.02	0.22	2.83	1.83	0.18	0.16	0.12	3/8"	3/8"	2.05
V53	8	8.35	5.43	1.14	0.18	2.87	1.83	0.28	0.16	0.12	1/2"	1/2"	2.28

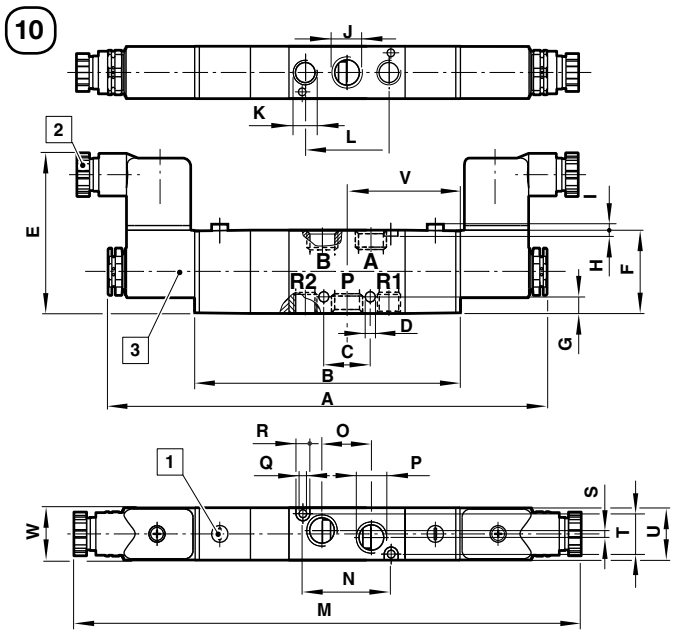
Series	Drawing	M	N	O	P	Q	R	S	T	U	W
V50	7	6.89	1.34	0.63	1/8"	0.13	0.24	0.08	0.51	0.71	0.63
V51	8	7.80	1.50	0.83	1/4"	0.13	0.24	0.12	0.67	0.89	0.87
V52	8	8.74	0.51	1.18	3/8"	0.18	0.31	-	0.91	1.18	0.87
V53	8	9.37	2.83	1.10	1/2"	0.17	0.31	0.18	0.91	1.18	0.87

Dimensions in inches

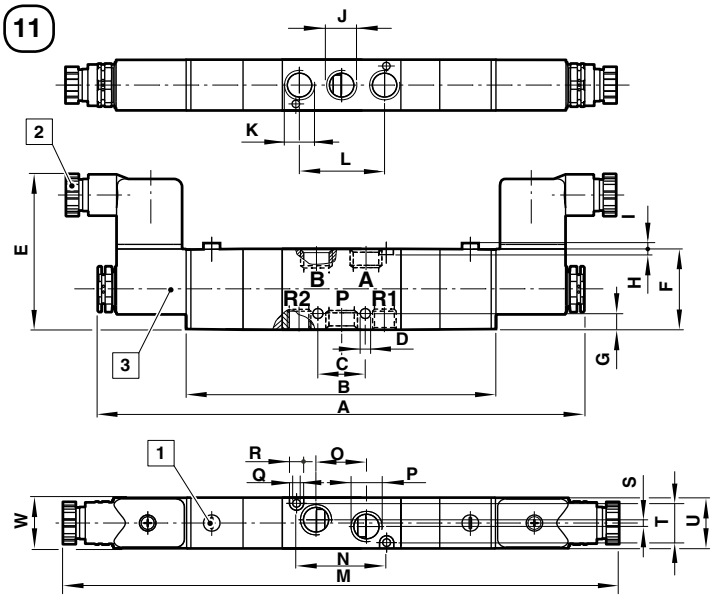
5/3 Double solenoid pilot valve, 1/8" port



5/3 Double solenoid pilot valve, 1/4" ports



5/3 Double solenoid pilot valve, 3/8"and 1/2" ports



1 Manual override (Push and Turn)

2 4-6 mm cable dia.

3 Solenoid rotates
2 x 180° (V50) 4 x 90° (V51toV53)

4 6-8 mm cable dia.

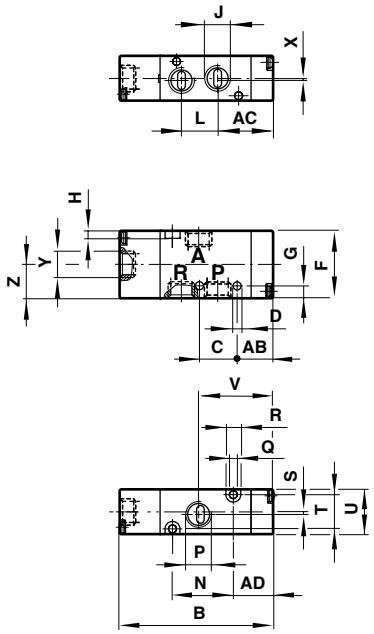
Series	Drawing	A	B	C	D	E	F	G	H	I	J	K	L
V50	9	6.42	3.78	0.57	0.13	2.17	1.06	0.20	0.12	-	1/8"	1/8"	1.14
V51	10	7.40	4.69	0.79	0.17	2.64	1.38	0.28	0.12	0.12	1/4"	1/8"	1.42
V52	11	9.61	7.07	1.02	0.22	2.83	1.83	0.18	0.16	0.12	3/8"	3/8"	2.05
V53	11	10.45	7.54	1.14	0.18	2.87	1.83	0.28	0.16	0.12	1/2"	1/2"	2.28

Series	Drawing	M	N	O	P	Q	R	S	T	U	V	W
V50	9	7.24	1.34	0.63	1/8"	0.13	0.24	0.08	0.51	0.71	1.71	0.63
V51	10	8.62	1.50	0.83	1/4"	0.13	0.24	0.12	0.67	0.89	1.91	0.87
V52	11	10.83	0.51	1.18	3/8"	0.18	0.31	-	0.91	1.18	-	0.87
V53	11	11.48	2.83	1.10	1/2"	0.17	0.31	0.18	0.91	1.18	-	0.87

Dimensions in inches

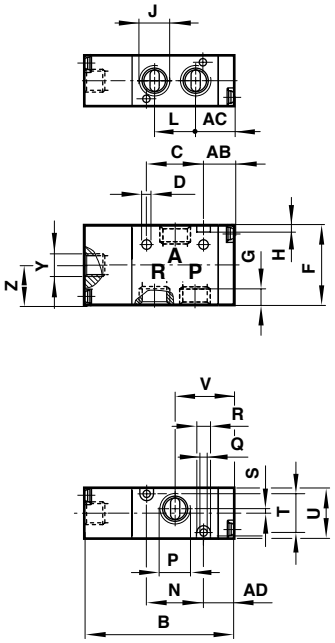
3/2 Single air pilot valve, 1/8" port Air spring return

12



3/2 Single air pilot valve, 1/1/4"to 1/2" ports Mechanical spring return

13

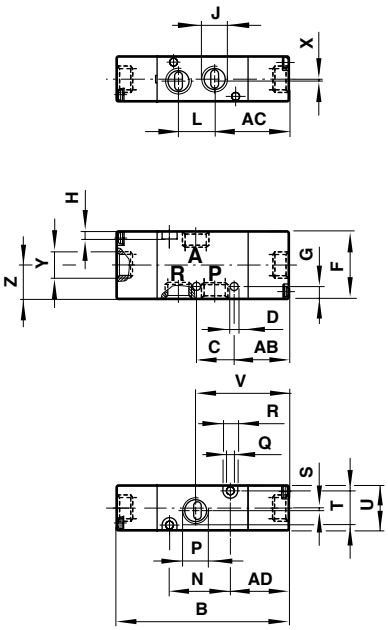


Series	Drawing	AB	AC	AD	B	C	D	F	G	H	J	L
V50	12	0.53	0.85	0.59	2.44	0.59	0.13	1.06	0.20	0.12	1/8"	0.57
V51	13	0.53	0.67	0.53	2.58	0.98	0.17	1.38	0.33	0.12	1/4"	0.71
V52	13	0.51	1.02	0.59	3.43	1.02	0.18	1.83	1.56	0.16	3/8"	1.02
V53	13	0.49	1.06	0.59	0.16	1.14	0.18	1.83	1.56	0.16	1/2"	1.14
Series	**Drawing**	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**X**	**Y**	**Z**
V50	12	0.91	1/8"	0.13	0.24	0.04	0.51	0.71	1.16	0.02	1/8"	0.53
V51	13	0.98	1/4"	0.13	0.24	0.08	0.67	0.89	1.02	-	1/8"	0.69
V52	13	1.61	3/8"	0.18	0.31	-	0.91	1.18	1.61	-	1/8"	0.67
V53	13	1.89	1/2"	0.17	0.31	0.10	0.91	1.18	1.59	-	1/8"	0.79

Dimensions in inches

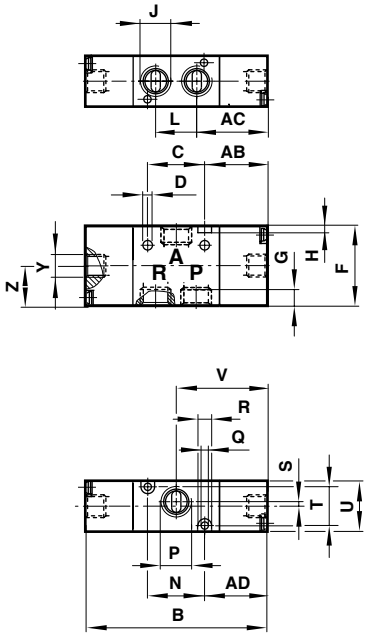
3/2 Double air pilot valve, 1/8" port

14



3/2 Double air pilot valve, 1/4"to 1/2" ports

15

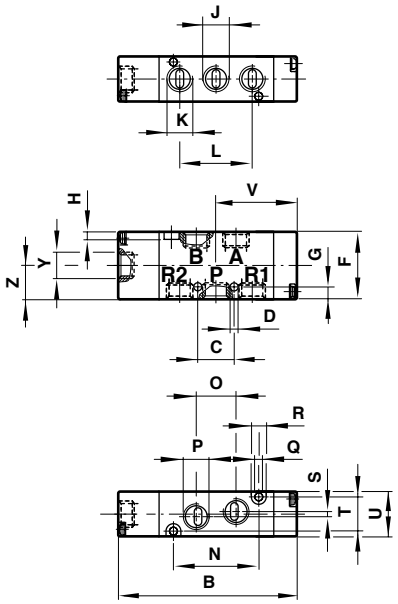


Series	Drawing	AB	AC	AD	B	C	D	F	G	H	J	L
V50	14	0.54	0.86	0.62	2.74	0.60	0.13	1.07	0.20	0.12	1/8"	0.58
V51	15	0.54	0.68	0.54	3.14	0.99	0.17	1.39	0.34	0.12	1/4"	0.72
V52	15	0.52	1.03	0.60	4.10	1.03	0.18	1.85	1.57	0.16	3/8"	1.03
V53	15	0.50	1.07	0.60	4.38	1.15	0.18	1.85	1.57	0.16	1/2"	1.15
Series	**Drawing**	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**X**	**Y**	**Z**
V50	14	0.91	1/8"	0.13	0.24	0.04	0.51	0.71	1.16	0.02	1/8"	0.53
V51	15	0.98	1/4"	0.13	0.24	0.08	0.67	0.89	1.02	–	1/8"	0.69
V52	15	1.61	3/8"	0.18	0.31	0.00	0.91	1.18	1.61	–	1/8"	0.67
V53	15	1.89	1/2"	0.17	0.31	0.10	0.91	1.18	1.59	–	1/8"	0.67

Dimensions in inches

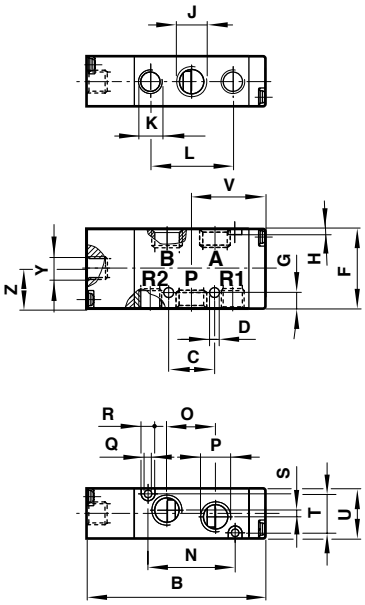
5/2 Single air pilot valve, 1/8" port Air spring return

16



5/2 Single air pilot valve, 1/4"to 1/2" ports Mechanical spring return

17

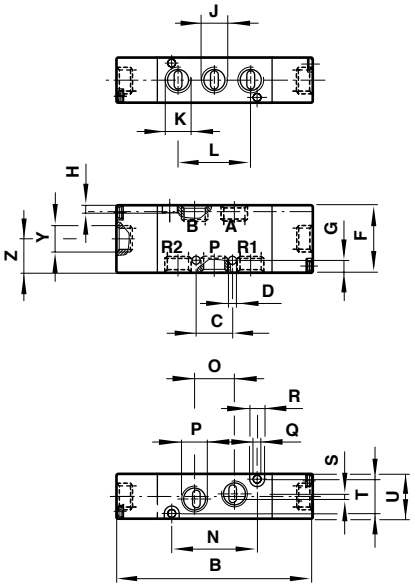


Series	Drawing	B	C	D	F	G	H	J	K	L	N
V50	16	2.87	0.57	0.13	1.06	0.20	0.12	1/8"	1/8"	1.14	1.34
V51	17	3.05	0.79	0.17	1.38	0.28	0.12	1/4"	1/8"	1.42	1.50
V52	17	4.17	1.02	0.22	1.83	0.18	0.16	3/8"	3/8"	2.05	0.51
V53	17	4.65	1.14	0.18	1.83	0.28	0.16	1/2"	1/2"	2.28	2.83
Series	**Drawing**	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**Y**	**Z**
V50	16	0.63	1/8"	0.13	0.24	0.08	0.51	0.71	1.30	1/8"	0.53
V51	17	0.83	1/4"	0.13	0.24	0.12	0.67	0.89	1.26	1/8"	0.69
V52	17	1.18	3/8"	0.18	0.31	-	0.91	1.18	1.77	1/8"	0.67
V53	17	1.10	1/2"	0.17	0.31	0.18	0.91	1.18	2.01	1/8"	0.79

Dimensions in inches

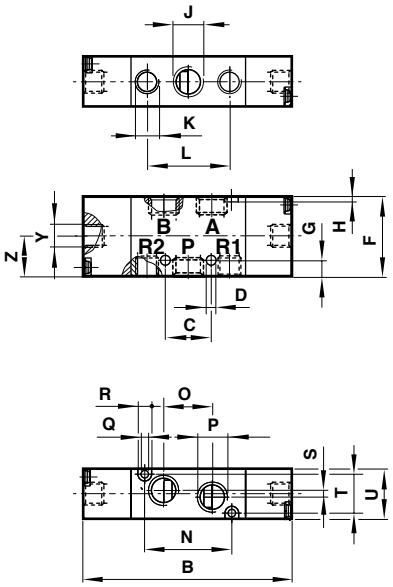
5/2 Double air pilot valve, 1/8" port

18



5/2 Double air pilot valve, 1/4"to 1/2" ports

19



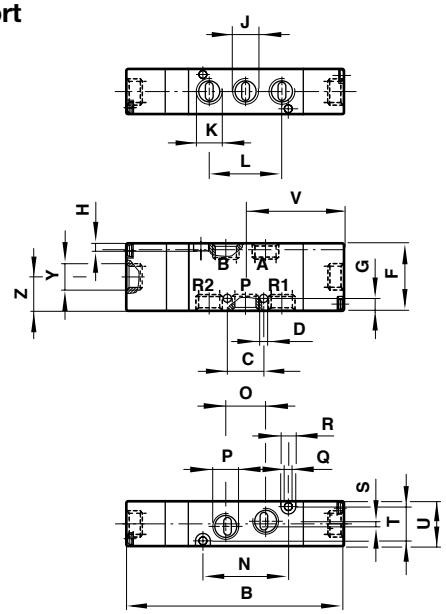
Series	Drawing	B	C	D	F	G	H	J	K	L	N
V50	18	3.15	0.57	0.13	1.06	0.20	0.12	1/8"	1/8"	1.14	1.34
V51	19	3.58	0.79	0.17	1.38	0.28	0.12	1/4"	1/8"	1.42	1.50
V52	19	4.80	1.02	0.22	1.83	0.18	0.16	3/8"	3/8"	2.05	0.51
V53	19	5.28	1.14	0.18	1.83	0.28	0.16	1/2"	1/2"	2.28	2.83

Series	Drawing	O	P	Q	R	S	T	U	Y	Z
V50	18	0.63	1/8"	0.13	0.24	0.08	0.51	0.71	1/8"	0.53
V51	19	0.83	1/4"	0.13	0.24	0.12	0.67	0.89	1/8"	0.69
V52	19	1.18	3/8"	0.18	0.31	-	0.91	1.18	1/8"	0.67
V53	19	1.10	1/2"	0.17	0.31	0.18	0.91	1.18	1/8"	0.79

Dimensions in inches

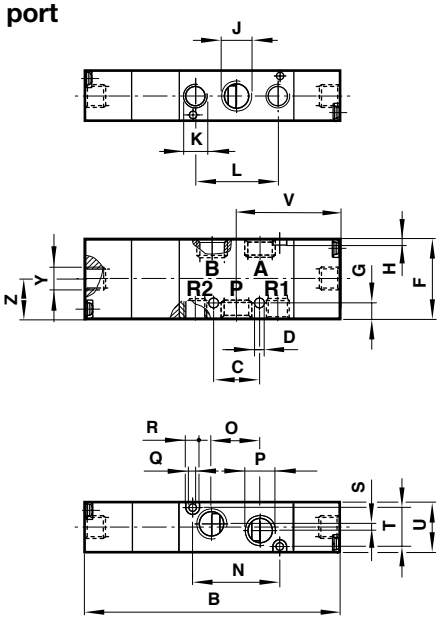
5/3 Double air pilot valve, 1/8" port

20



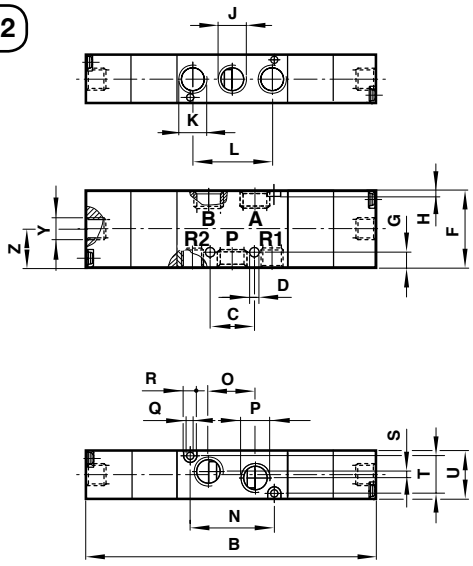
5/3 Double air pilot valve, 1/4" port

21

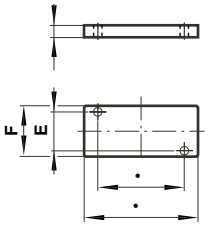


5/3 Double air pilot valve, 3/8" and 1/2" ports

22



Blanking plate

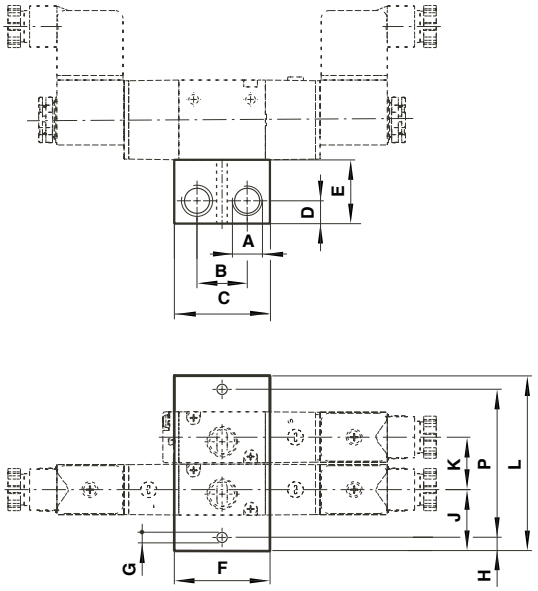


Type	Function	A	B	C	E	F	Weight (lb)
V500351	3/2	0.91	1.38	0.08	0.51	0.71	0.02
V510351	3/2	0.98	1.50	0.08	0.67	0.89	0.03
V520351	3/2	1.61	2.17	0.08	0.91	1.18	0.07
V530351	3/2	1.89	2.44	0.08	091	1.18	0.13
V500551	5/2	1.33	1.69	0.08	0.51	0.71	0.02
V510551	5/2	1.50	2.0	0.08	0.67	0.89	0.04
V520551	5/2	0.51	2.91	0.08	0.91	1.18	0.07
V530551	5/2	2.83	3.39	0.08	0.91	1.20	0.18

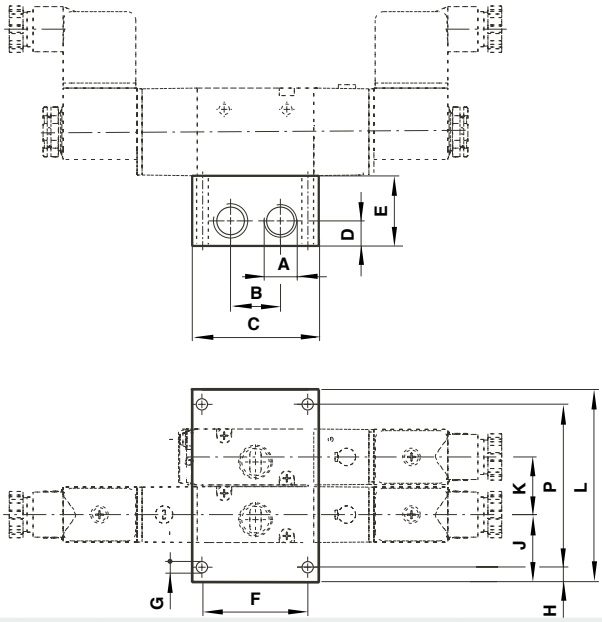
Series	Drawing	B	C	D	F	G	H	J	K	L	N
V50	20	3.50	0.57	0.13	1.06	0.20	0.12	1/8“	1/8“	1.14	1.34
V51	21	4.41	0.79	0.17	1.38	0.28	0.12	1/4“	1/8“	1.42	1.50
V52	22	6.91	1.02	0.22	1.83	0.18	0.16	3/8“	3/8“	2.05	0.51
V53	22	7.38	1.14	0.18	1.83	0.28	0.16	1/2“	1/2“	2.28	2.83
Series	**Drawing**	**O**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**Y**	**Z**
V50	20	0.63	1/8“	0.13	0.24	0.08	0.51	0.71	1.30	1/8“	0.53
V51	21	0.83	1/4“	0.13	0.24	0.12	0.67	0.89	1.30	1/8“	0.69
V52	22	1.18	3/8“	0.18	0.31	-	0.91	1.18	1.77	1/8“	0.67
V53	22	1.10	1/2“	0.17	0.31	0.18	0.91	1.18	2.01	1/8“	0.79

Dimensions in inches

Manifold system, 3/2 valves
For V50 and V51



for V52 and V53

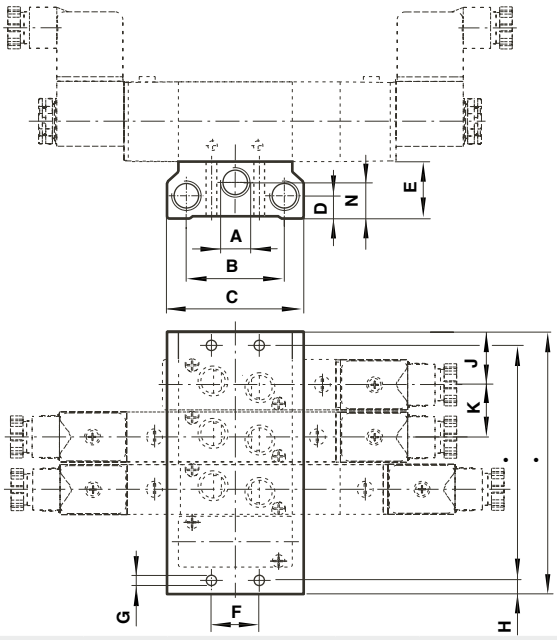


Series	A	B	C	D	E	Ø G	H	J	K	L	P	Weight (lb)
V50	1/4"	0.87	1.65	0.39	1.10	0.18	0.20	0.75	0.75	0.75 + (N x 0.75)	0.35 + (N x 0.75)	0.11 + (N x 0.11)
V51	1/4"	0.87	1.65	0.39	1.10	0.18	0.24	1.06	0.91	1.22 + (N x 0.91)	0.75 + (N x 0.91)	0.18 + (N x 0.13)
V52	3/8"	1.02	2.60	0.45	1.06	0.18	0.20	0.98	1.22	0.75 + (N x 1.22)	0.35 + (N x 1.22)	0.13 + (N x 0.24)
V53	1/2"	1.18	2.83	0.59	1.26	0.18	0.20	0.98	1.22	0.75 + (N x 1.22)	0.35 + (N x 1.22)	0.15 + (N x 0.31)

N = Number of stations 2 to 10

Manifold system, 5/2 valves

Dimensions in inches



Series	A	B	C	D	E	F	Ø G	H	J	K	L	P	Weight (lb)
V50	1/4"	1.57	2.28	0.43	0.98	0.79	0.18	0.20	0.75	0.75	0.75 + (N x 0.75)	0.35 + (N x 0.75)	0.89 + (N x 0.89)
V51	1/4"	1.69	2.36	0.39	0.98	0.83	0.18	0.24	0.91	0.91	0.91 + (N x 1.22)	0.43 + (N x 0.91)	0.15 + (N x 0.13)
V52	3/8"	2.40	3.31	0.47	1.06	1.18	0.18	0.20	0.98	1.22	0.75 + (N x 1.22)	0.35 + (N x 1.22)	0.13 + (N x 0.20)
V53	1/2"	2.28	3.78	0.51	1.18	1.18	0.18	0.20	0.98	1.22	0.75 + (N x 1.22)	0.35 + (N x 1.22)	0.18 + (N x 0.33)

N = Number of stations 2 to 10